

XIV.—*Descriptions of two new Birds from Northern Peru.*

By HANS VON BERLEPSCH.

(Plate VI.)

† 1. BROTOGERYS GUSTAVI, sp. nov. (Plate VI.)

B. corpore obscure viridi, subtus dilutiore; pileo leviter cyaneo tincto; remigibus rectricibusque cyaneis viridi marginatis, rectricibus externis fere unicoloribus viridibus; humeris vel tectricibus alarum minoribus superioribus anterioribus, margine alarum toto cum tectrice primariorum extima, necnon tectricibus alarum inferioribus anterioribus aureo-flavis; mento croceo; rostro pallide corneo; pedibus corneis. Long. tot. 180–190, al. 113–117, caud. 60–68, rostr. culm. 19–20, tars. $12\frac{1}{2}$ – $13\frac{1}{2}$ mm.

Obs. *B. jugulari* ex Amaz. sup. valde affinis hæc nova species, sed humeris cum margine alarum pure *aureo-flavis*, nec viridibus, primo visu distinguenda.

Hab. Tuanfué, Huallaga super., Peruviae or. (three specimens collected in August 1887 by Mr. Gustav Garlepp).

Mus. Berlepsch, Nehr Korn, Salvin-Godman.

This fine new species I have dedicated to its discoverer, Mr. Gustav Garlepp, of Köthen, Anhalt, who has collected birds during the last three years in different places in North-eastern Peru, and has been fortunate enough to get several of great rarity, such as *Comurus roseifrons*, Gray (in great numbers), *Ara coultoni*, Scl., *Pteroglossus beauharnaisi*, *Zebrilus pumilus* (hitherto only known from Guiana), and many others of considerable interest. Mr. Garlepp tells me that *Brotogeterys gustavi* was by no means an uncommon bird in the vicinity of Tuanfué, a place situated far up on the Huallaga. It is quite possible that this Parrot is the representative of the common *B. jugularis* of Upper Amazonia, in the last-named region. At the same time, it is probable that there exist still many other novelties in that little-known country, where Mr. Garlepp, unfortunately, collected but few specimens of birds.

B. gustavi is evidently a near ally of *B. jugularis*, Deville, but in the latter species there is no yellow whatever on the

wing, whereas in *B. gustavi* the shoulders, or the anterior least upper wing-coverts, the anterior margin of the wing, the first of the coverts of the primaries, and the anterior under wing-coverts, are of a *fine golden yellow*. It appears also that in the new species the chin is of a paler orange-rufous. The front is not suffused with yellowish, as in *B. jugularis*, and the back appears to be of a darker green; the wings, too, are a little shorter.

As well in coloration as geographically, *B. gustavi* seems to be intermediate between *B. jugularis* and *B. chrysosoma*, the latter species showing also some yellow in the wing, but being further distinguished by possessing an orange border to the front.

The three specimens collected by Mr. Garlepp do not show any differences in their coloration.

† 2. PHAËTHORNIS RIOJÆ, sp. n.

P. striigulari affinis, sed major: differt etiam corpore subtus rufescentiore, et gula superiore nigrescentiore; rectricum externarum apicibus subtilissime albo marginatis (nec late fulvo apicatis); tectricibus subcaudalibus pure albis nec fulvescentibus; macula pectorali fere ut in *Ph. pygmaeo* e plumis latis nigro-viridibus (in *Ph. striigulari* omnino absentibus). Long. tot. 110, al. $44\frac{1}{2}$, rectr. intermed. $41\frac{1}{2}$, submed. $36\frac{1}{2}$, extern. $22\frac{1}{2}$, rostr. culm. $23\frac{1}{2}$ mm.

Hab. Rioja, Peru septentr. (one specimen, marked male, collected by Mr. Gustav Garlepp, May 23, 1887, number 525).

Mus. H. v. Berlepsch (type).

This is evidently a new species of *Phaethornis*, nearly allied to, but easily distinguishable from, *P. striigularis* by its larger size, blacker throat, deeper fulvous abdomen, pure white, not fulvous, under tail-coverts, and narrow white borders instead of broad fulvous tips to the outer tail-feathers. The feathers in the middle of the breast are broad and greenish black; they form a tuft somewhat as in the male of *P. pygmaeus* and its allies, while such a tuft is altogether wanting in *P. striigularis*.

— XV.—On the "*Manus*" of *Phœnicopterus*.

By W. K. PARKER, F.R.S.

IN a note "On the secondary Carpals, Metacarpals, and Digital Rays in the Wings of existing Carinate Birds," published in the Proceedings of the Royal Society (vol. xliii. pp. 322-325, 1888), I have spoken of the presence of *claws* on the first and second digits (pollex and index) of birds (see p. 323).

"In some birds [I said], *e. g.* the Passerines, the pollex, or first digit, has only one phalanx attached to its short metacarpal, the second only two, and the third only one phalanx. In other birds, such as the Plovers, Gulls, and Cormorants, an additional or unguis phalanx is found on the first and second digit; and in some others (*e. g.* *Numenius*), during their embryonic state, a small nucleus also is seen on the end of the aborted phalanx of the third digit."

Further research, made since the passage quoted above was written, has satisfied me that, besides the Passerines, those Picarian forms that have the wing most like that of the Passerines (*e. g.* the *Picidæ*, *Rhamphastidæ*, and *Alcedinidæ*) are entirely without the distal phalanx on the pollex and index.

Except in these cases, and in the abortive and greatly specialized wings of the Penguins, all the other Carinatae have, either for a time or permanently, an unguis phalanx on both the index and pollex. As a rule, that of the pollex only has a neatly formed horny claw covering the little bone, the claw of the index becoming more and more aborted during growth. In the Parrots, however (*e. g.* *Stringops*), the ripe embryo has two well-formed claws, but that on the index is three times as large as that on the pollex.

In *Phœnicopterus ignipalliat* the claw on the unguis phalanx of the pollex is well formed and is 8 millim. long; that on the index has lost its proper form, and is a thin epidermic skin over the little third phalanx, which is 3.5 millim. long.

The "*manus*" in this bird is long and slender; the humerus is 195 millim. long, the ulna 207 millim., and the manus

163 millim., so that the distal member of the wing is more than three fourths the length of the ulna, and five sixths the length of the humerus.

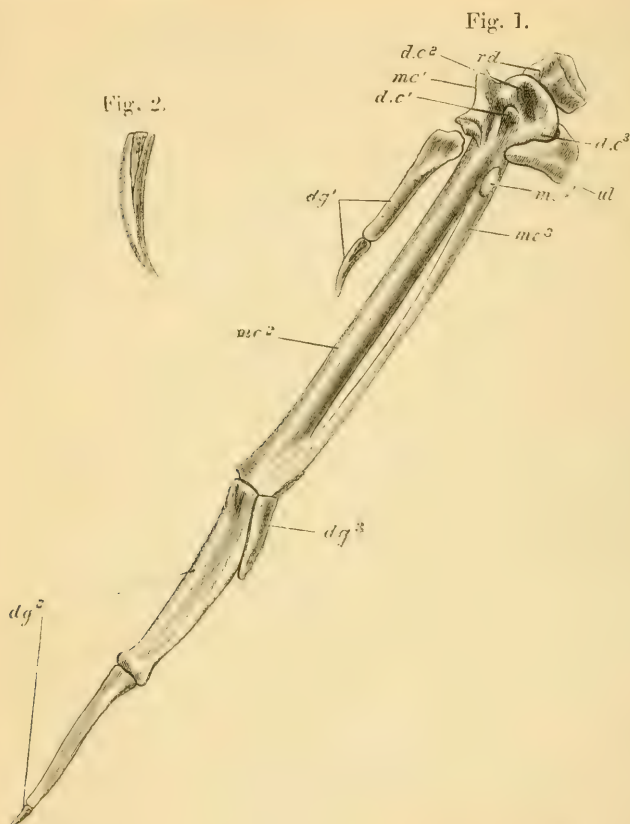


Fig. 1. Inner view of right manus of *Phœnicopterus ignipalliatu8*, $\frac{2}{3}$ nat. size. *rd*, radiale; *ul*, ulnare; *d.c.¹*, 1st distal carpal; *d.c.²*, 2nd distal carpal; *d.c.³*, 3rd distal carpal; *mc.¹*, 1st metacarpal; *mc.²*, 2nd metacarpal; *mc.³*, 3rd metacarpal; *mc.^{3'}*, rudiment of 4th metacarpal; *dg.¹*, 1st digit (pollex); *dg.²*, 2nd digit (index); *dg.³*, 3rd digit.

Fig. 2. Claw of pollex of ditto, $1\frac{1}{2}$ nat. size.

This, then, is a good average, as to these proportions, in a long-winged bird, the most extraordinary forms being the "Macrochires" on the one hand, with their short arm and forearm and enormously long manus; and on the other hand the

Hornbills (Bucerotidae), in which the humerus is moderate, the ulna very long, and the manus extremely short.

In *Phænicopterus* (see figure, p. 184) the two free carpals, radiale and ulnare, are large and well formed; the three fused distal carpals are also normal; there is an oval rudiment of the fourth metacarpal (*mc*³) on the inner face of the third at its proximal end. The bony bridge over the outside of the long interosseous space, formed by an intercalary element, is aborted, and there is scarcely any flanging-out of the first phalanx of the pollex and the second of the index, such as is seen in many long-winged birds, also due to secondary elements; but the first phalanx of the index has the normal dilatation. This phalanx has no interosseous space in it, such as is seen in certain birds. The phalanx of the third digit is only three fifths of the length of this dilated bone; it is slightly arcuate, and strongly attached to the other bone on its ulnar edge.

On the whole, this is a very perfectly formed wing, and is more like that of an Ibis than that of a Goose, as, indeed, is much of the structure of *Phænicopterus**.

XVI.—*On the Ornithology of Northern Borneo.* By R. BOWDLER SHARPE, F.L.S., F.Z.S., &c. *With Notes* by JOHN WHITEHEAD.—Part II.†

(Plates VII., VIII.)

Fam. ORIOLIDÆ.

33. ORIOLUS XANTHONOTUS.

Oriolus xanthonotus, Horsf.; Sharpe, Cat. B. iii. p. 213; Salvad. Ucc. Born. p. 277; Sharpe, Ibis, 1879, p. 251.

a. ♀ ad. Benkoka, Nov. 22, 1885.

b. ♀ ad. Kina Balu, Jan. 14, 1888.

c. ♂ ad. Kina Balu, March 1887.

d. ♂ juv. Kina Balu, April 1888.

* Professor Huxley (Proc. Zool. Soc. 1867, p. 461) has overstated the Anserine characters of this bird; its "bas-i-ptyergoids" are aborted, as in the Ibises.

† Continued from p. 85.

